R5320

REED INSTRUMENTS

Wire Tracer and Circuit Testing Kit

WARRANTY 1 YEAR WARRANTY

Instruction Manual

Table of Contents

Introduction

Thank you for purchasing your REED R5320 Wire Tracer and Circuit Testing Kit. Please read the following instructions carefully before using your instrument. By following the steps outlined in this manual your meter will provide years of reliable service.

Product Quality

This product has been manufactured in an ISO9001 facility and has been calibrated during the manufacturing process to meet the stated product specifications. If a certificate of calibration is required please contact the nearest authorized REED distributor or authorized Service Center. Please note an additional fee for this service will apply.

Safety

- Never attempt to repair or modify your instrument.
- Servicing should only be provided by an authorized service center.
- Do not use or store this device in dusty, hot or wet environments.
- Do not use this device on live circuits exceeding 60VAC or 70VDC.
- Do not use this device during thunderstorms.

Features

- Test modes include: identifying and locating wires, validating cable/line connections and verifying telephone line continuity/line polarity
- Modular adapters provide direct connection to RJ45 and RJ11 wiring
- Alligator clip adapter allows for easy connection to non-terminated cables
- Adjustable sensitivity wheel improves wire identification and eliminates false detection
- Visual (flashing LEDs) and audible (pulsating beeper) indicators
- Integrated flashlight supports applications in low lit environments
- Built-in non-contact voltage detector
- Earphone jack for loud environments (earphones sold separately)
- Rechargeable batteries
- Low battery indicator and auto shut-off

Included

- Transmitter
- Receiver
- Micro-USB Charging Cable
- RJ11 Adapter Cable
- RJ45 Adapter Cable
- RJ11 Alligator Clip Adapter Cable
- Carrying Case

Specifications

Testing Modes

- RJ45 (Ethernet) Network cable tracing
- RJ11 (Telephone) Line tracing
- Miscellaneous line/Wire tracing (using RJ11/Alligator clip adapter)
- RJ45 (Ethernet) Network cable validation
- RJ11 (Telephone) Line validation
- Non-contact voltage detector

Transmitter

- Port flashing: Port flashing and wire tracking can be turned on at same time
- Wire tracking signal frequency: 125kHz
- Test Speed: Fast (2Hz) Slow (1Hz)
- Network Wire: Shielded/Unshielded
- Open-short circuit Test: Load <9kΩ: Short; Load >17kΩ: Open
- Open polarity test: Test range: DC: +5V~+70V or -70V~-5V
- Input protection: 60VDC

Receiver

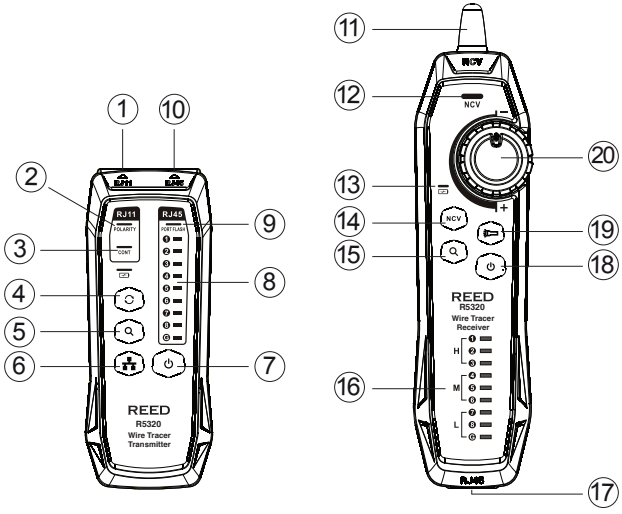
- Wire tracking sensitivity: RJ11 ≤9842' (3000m)/RJ45 ≤328' (100m)
- Input Impedance: >100MΩ

continued…

General Specifications

Signal Mode:	Modulation signal (125kHz)
Visual Indicator:	Yes (LEDs)
Audible Indicator:	Yes (Pulsating beeper)
Sensitivity Settings:	Yes (Adjustable wheel)
Compatible Wire Type:	RJ-11, RJ-45, Alligator clips for connection to non-terminated wire
Non-Contact Voltage Detector:	Yes (40 to 1000VAC)
Earphone Jack:	Yes (3.5mm)
Built-in Flashlight:	Yes
Auto Shut-off:	Transmitter: Yes (after 60 mins) Receiver: Yes (after 10 mins)
Power Supply:	1050mAh rechargeable Li-ion battery
Charging Time:	Approx. 2 hours (Micro-USB)
Low Battery Indicator:	Yes
Battery Life:	Transmitter: >8 hours Receiver: >5 hours
Operating Temperature:	14 to 122°F (-10 to 50°C)
Operating Humidity Range:	20 to 75%
Operating Altitude:	≤6561' (2000m)
Product Certifications:	CE, RoHS
Dimensions:	Transmitter: 5.1 x 2 x 1.1" (130 x 51 x 28mm) Receiver: 7.8 x 1.9 x 1.3" (197 x 48 x 34mm)
Weight:	Transmitter: 3.4oz (95g) Receiver: 4.5oz (127g)

Instrument Description



1. RJ11 Jack
2. POLARITY Indicator
3. CONT Indicator
4. Switch Button
5. Tracking Button
6. Validating Indicator
7. Power Button
8. Line Sequence Indicators
9. PORT FLASH Light
10. RJ45 Jack
11. Antenna
12. NCV Indicator
13. Charging State Indicator
14. NCV Button
15. Tracking Button
16. Line Sequence Indicators
17. RJ45 Jack
18. Power Button
19. Flashlight Button
20. Sensitivity Knob

Operating Instructions

Network Line Tracking

1. Insert the RJ45 plug of the network line into the RJ45 jack of the transmitter.
2. Plug the other end of the RJ45 plug into the port.
3. Turn on the transmitter by pressing the Power button.
4. Press the 🔍 button on the transmitter to enable the tracking function. In tracking mode, press the ↻ button to enable the flashing function simultaneously. If the target network line is connected to an active switch, router or network card, the "PORT FLASH" light of the transmitter will flash synchronously with the network port indicator.
5. Turn on the receiver by pressing the Power button.
6. Press the 🔍 button on the receiver to start tracking. When beeps are heard, the target network line has been located. If the application involves multiple cables, it is recommended to use the sensitivity wheel. Louder sound signifies the target cable is in close proximity.

Telephone Line Tracking

1. Insert the RJ11 plug of the telephone line into the RJ11 jack of the transmitter.
2. Plug the other end of the RJ11 cable into the telephone jack.
3. Turn on the transmitter by pressing the Power button.
4. Press the 🔍 button on the transmitter to enable the tracking function.
5. Turn on the receiver by pressing the Power button.
6. Press the 🔍 button on the receiver to start tracking. When beeps are heard, the target telephone line has been located. If the application involves multiple cables, it is recommended to use the sensitivity wheel. Louder sound signifies the target cable is in close proximity.

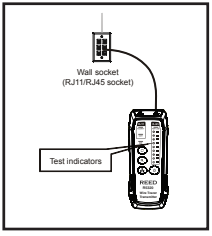
Power Cable Tracking

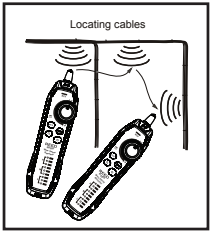
1. Use the RJ11 alligator clip adapter cable to connect the transmitter and metal cable being tracked.
2. Turn on the transmitter by pressing the Power button.

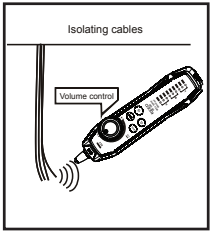
continued…

3. Press the 🔍 button on the transmitter to enable the tracking function.
4. Turn on the receiver by pressing the Power button.
5. Press the 🔍 button on the receiver to start tracking. When beeps are heard, the target cable has been located. If the application involves multiple cables, it is recommended to use the sensitivity wheel. Louder sound signifies the target cable is in close proximity.

Demonstration of Tracking Operation





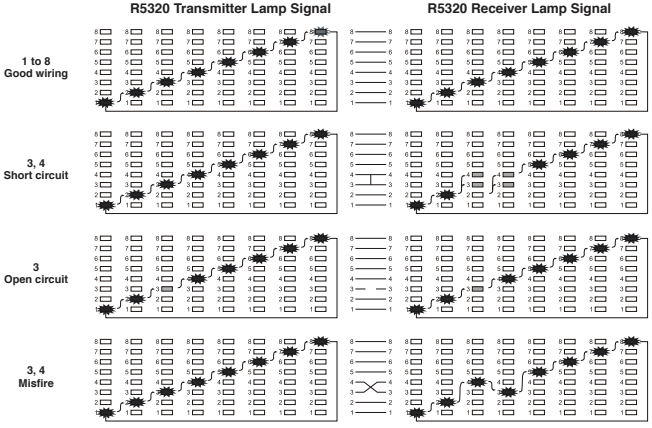


RJ45 Cable Validating

1. Insert both ends of the RJ45 cable under test into the RJ45 jacks of the transmitter and receiver.
2. Power ON the transmitter and receiver.
3. Press the 🖧 button, the ↻ button flashes flashes, and the validating function is enabled.
4. During the test, press the ↻ button to switch between fast and slow mode.

continued…

5. Verify the state of the cable (good wiring, short circuit, open circuit, miswire) according to the line sequence indicators on the transmitter and receiver. See image below for additional information on the indicators.



RJ11 Cable Validating

1. Insert the RJ11 plug of the cable under test into the RJ11 jack of the transmitter.
2. Plug the other end of the RJ11 cable into the telephone jack.
3. Turn on the transmitter by pressing the Power button.
4. Press the ⁂ button, the ↻ button flashes, and the validating function is enabled.
5. The "CONT" indicator lights up green to indicate open circuit of the cable, and red to indicate short circuit of the cable. The "POLARITY" indicator lights up green to indicate that the cable has a positive polarity voltage, red to indicate that the cable has a reverse polarity voltage, and green and red flash alternately to indicate a ringing signal or AC power on the cable.

continued…

Non-Contact Voltage Detector

Press the **NCV** button on the receiver to enable the NCV function. When the target cable or socket has an AC voltage over 40V, the receiver will beep and the "NCV" indicator will flash simultaneously.

Turning Flashlight On/Off

Press the button to turn the flashlight of the receiver ON/OFF.

Applications

- IT professionals cable installation/labelling and troubleshooting
- Telecom and Datacom technicians
- Identify and locate non-energized wires in walls, ceilings, and floors

Product Care

To keep your instrument in good working order we recommend the following:

- Store your product in a clean, dry place.
- If your instrument isn't being used for a period of one month or longer please remove the battery.
- Clean your product and accessories with biodegradable cleaner. Do not spray the cleaner directly on the instrument. Use on external parts only.

Product Warranty

REED Instruments guarantees this instrument to be free of defects in material or workmanship for a period of one (1) year from date of shipment. During the warranty period, REED Instruments will repair or replace, at no charge, products or parts of a product that proves to be defective because of improper material or workmanship, under normal use and maintenance. REED Instruments total liability is limited to repair or replacement of the product. REED Instruments shall not be liable for damages to goods, property, or persons due to improper use or through attempts to utilize the instrument under conditions which exceed the designed capabilities. In order to begin the warranty service process, please contact us by phone at 1-877-849-2127 or by email at info@reedinstruments.com to discuss the claim and determine the appropriate steps to process the warranty.

Product Disposal and Recycling

Please follow local laws and regulations when disposing or recycling your instrument. Your product contains electronic components and must be disposed of separately from standard waste products.

Product Support

If you have any questions on your product, please contact your authorized REED distributor or REED Instruments Customer Service by phone at 1-877-849-2127 or by email at info@reedinstruments.com.

Please visit **www.REEDINSTRUMENTS.com** for the most up-to-date manuals, datasheets, product guides and software.

REED

INSTRUMENTS

TEST & MEASURE WITH CONFIDENCE

CHECK OUT OUR LATEST PRODUCTS!